

## ABSTRACT OF THE DISCLOSURE

A projection exposure apparatus includes an exposure light source, an illumination system for illuminating a pattern, formed on a first object, with light from the exposure light source, a projection optical system for projecting a pattern, as illuminated with the light, onto a second object, and an interferometer for use in measurement of an optical characteristic of the projection optical system, wherein the interferometer is operable to perform the measurement by use of light from the exposure light source.